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REMARKS

New claim 30 specifies that the cation of the chelator salt comprises a protonated or quaternised amine containing not more than 1 hydroxyl group per N-substituent and at least one N-substituent comprising at least one C₁-C₁₀ terminal hydrocarbyl group. See, for example, page 13, lines 6 to 9. Entry thereof is respectfully requested.

Pursuant to the prior Office Action (i.e., the Action of May 4, 2007) all of the then pending claims were rejected over Voss (US 3,507,796) in view of Franks et al. (US 4,145,532). In response, on October 31, 2007 Applicants submitted an Amendment that included an amendment of claims 1 and 29 (the only independent claims in the application). Claim 1 was amended to specify that less than 50% by weight of water is present in the compositions therein described (excluding any volatile propellant that may be present) and claim 29 was amended to specify that the cation of the chelator salt therein described is protonated 2-amino-2-methyl-1-propanol, cyclohexylamine, diisopropanolamine, or 2-aminobutan-1-ol.

At page 2, first paragraph the instant Office Action (i.e., the Office Action of February 7, 2008) states: "Applicant's arguments filed 2/8/07 have been fully considered but they are not persuasive." However, at the third paragraph, the same Action goes on to state: "Claims 1, 4, 7, 8, 10-12, 15, 18, 21 and 23 no longer remain rejected under 35 U.S.C. 103(a) as being unpatentable over Voss (US 3507796 in view of Franks et al. (US 4145532). "Following its summary of the prior amendment, the Action sets forth what appears to be its current position regarding the obviousness rejection as follows: "Applicants have amended claim 1 to recite that the composition comprises less than 50%

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water and claim 29 to recite the specific cations of the chelator salts. For this reason the rejection is withdrawn". See page 6, lines 1 to 4.

On or about May 6, 2008, in a telephone conversation with the undersigned (who had called requesting clarification of the rejections being applied against the subject claims), Examiner Alton Prior confirmed that the 35 U.S.C. §103 rejections against the subject claims was withdrawn for the reasons given at page 6 of the subject Action and that the only rejections remaining were the non-statutory obviousness type double patenting rejections set forth in the Office Action. Applicants note that the outstanding Action is the first instance of a double-patenting rejection being applied against the subject claims.

Pursuant to the non-statutory obviousness-type double patenting rejections, claims 1, 4-12, and 14-29 of the subject application were rejected over:

- (i) claims 1-18 of US 6,792, 914,
- (ii) claims 1, 4, 7, 8, 12-16, and 18-26 of co-pending application Serial No.

10/895,179, and

(iii) claims 1-21 of US 6,503,490.

These rejections are respectfully traversed.

One set of charts provided below lists the independent claims of the instant application and the issued or pending/non-withdrawn independent claims of the patents/application cited in the double-patenting rejection. Another set of charts summarizes the dependent claims of the subject application and those of US6,792,914 (the '914 patent) as well as the dependent pending or independent withdrawn claims of

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copending application Serial No. 10/895,179 (which claims priority from the application that issued as the '914 patent). Applicants note that the claims listed for Serial No. 10/895,179 are taken from the Amendment of October 31, 2007.¹

Comparing claim 1 of the subject application with claims 1 and 18 of the '914 patent, it is noted that in contrast to the chelator component of the instant claims (which is required to have an organic cation that comprises a protonated or quaternised amine), the iron chelator described by the claims of the '914 patent is described as being selected from a group of very specific materials, i.e., N,N'-ethylenebis[2-(2-hydroxyphenyl)glycine], triethylenetetraaminehexaacetic acid, and diethylenetriaminepentaacetic acid. distinguishing claims 1 and 18 of this application from claim 1 of the '914 patent is the instant requirement that the protonated or quaternised amine that forms the organic cation has 0 to 3 hydroxyl groups per N-substituent and at least one N-substituent comprising a C₁-C₁₀ terminal hydrocarbyl group. The specification of a limited number of hydroxyl groups and the requirement of a terminal hydrocarbyl group helps to define compositions that are relatively hydrophobic. Requiring the organic cation to have some hydrophobic character counter-balances the hydrophilic nature of the chelator salt anion, and in addition to the resulting chelator being compatible with a variety of organic solvents, promotes compatibility with other components normally found in compositions formulated deodorant use (for example, fragrance). No such express requirement of a limited number of hydroxyl groups coupled with a requirement of a specific terminal hydrocarbyl group is present in claims 1 and 18 of the '914 patent.

¹ In an Office Action dated March 4, 2007 in Serial No. 10/895,179, 35 USC 103(a) rejections were applied against the pending claims thereof over Voss in view of several secondary publications. To the extent that they are not already of record, the secondary publications are listed in a Supplemental Information Disclosure Statement that accompanies this response.

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Claim 1 of the '914 patent further includes a solubility promoter that may, but need not, be an organic amine (organic amines being but one class of solubility promoter described therein; when present it can result in the iron III chelator being present as a solubilised salt or acid salt). Independent claim 18 of the '914 patent requires the claimed composition to contain (i) a C₁ to C₄ monohydric alcohol carrier fluid at a specified level, (ii) an iron (III) chelator component selected from the group consisting of: N,N'-ethylenebis[2-(2-hydroxyphenyl)glycine], triethylenetetraaminehexaacetic acid, and diethylenetriaminepentaacetic acid, and (iii) water as a solubility promoter. Additionally, whereas, claim 1 of the subject application more broadly recites that the transition metal chelator comprises a solution in an <u>organic solvent</u>, claims 1 and 18 of the '914 patent read on a composition that comprises greater than 50% by weight of a C₁ to C₄ monohydric alcohol carrier fluid. Claim 29 of the subject application is further distinguished as specifying that the cation of the chelator salt is protonated 2-amino-2-methyl-1-propanol, cyclohexylamine, diisopropanolamine or 2-aminobutan-1-ol.

Dependent claims of the subject application and the '914 patent may be similar with respect to the specification of further components, for example, fragrance, additional antimicrobial agent, or propellant, or may add additional requirements as regards particular components that are similar, for example, the amount of chelator. See the second series of tables attached to this response. Notwithstanding, for the most part, many of the differences noted above in the discussion of the independent claims apply. As regards the amine solubility promoter, it is noted that claims 6, 7, 8 and 15 of the '914 patent require the presence of an amine solubility promoter, allowing for some potential overlap with instant claims. Notwithstanding the potential overlap, it is respectfully submitted that compositions comprising the organic-cation containing chelators of the instant claims (i.e., protonated or quaternised amines of transition metal chelators having particular structural

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requirements, which chelators <u>are not limited to salts of N,N'-ethylenebis[2-(2-hydroxyphenyl)glycine]</u>, <u>triethylenetetraaminehexaacetic acid, or diethylenetriaminepentaacetic</u>), describe compositions that, for purposes of obviousness-type double patenting, distinguish over the compositions claimed in the co-pending application.

Co-pending application Serial No. 10/895,179 (under rejection) has a single independent claim (claim 1) that is similar to claim 1 of the '914 patent. Among other differences in the express claim language, claim 1 of the co-pending application: specifies the monohydric alcohol carrier fluid as being present at a level of at least 25% by weight of the total composition and requires the presence of a solubility promoter selected from a group that reads on components (b) to (e) of the solubility promoter component of '914 claims. It is respectfully submitted that similar arguments apply regarding the inventiveness of the subject claims over those of co-pending '179 application. For comparative purposes independent and dependent claims of this application are summarized in the tables below.

US 6,503,490 (the '490 patent) is very different than the present application. The claims of the '490 patent all require a specified phenolic/enolic component. In the broadest claim description, the phenolic/enolic compound is specified as a compound that is a transferring dissociation promoter that operates by aiding the reduction of iron (III) bound to transferring in iron (II) and /or an anti-oxidant comprising a tert-butylphenol group. The benefits derived from the present invention are achieved without such a phenolic/enolic component and their attainment without such component cannot be said to be obvious in light of the '490 claims. Accordingly it is respectfully submitted that the subject claims patentably distinguish over those of the '490 patent.

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In view of the foregoing, reconsideration of the nonstatuatory obvious type double patenting rejections and allowance of the subject claims is respectfully requested. It is noted that a Supplemental Information Disclosure Statement and Petition to Suspend Prosecution accompany this response. The Supplemental Information Disclosure Statement discloses an opposition filed <u>June 6, 2008</u> in EP 1259215 B, a family member of co-pending application Serial No. 11/103,284 and US 6,893,630, and, if not already of record, the documents relied on by the opponent (Henkel) in those proceedings.

If a telephone conversation would be of assistance in advancing the prosecution of the present application, applicants' undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,

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KEK/sa (201) 894-2332

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Subject application (09/764,734)

groups per N-substituent and at least one N-substituent comprising a C.-C. to terminal hydrocarbyl group, wherein the antimicrobial composition is in the form of a deodorant product for use on the outer surface of the human body or on apparel worn in close proximity thereto, wherein less A carrier material and a salt of a transition metal chelator comprising a solution in an organic solvent of a transition metal chelator anion and organic cation, wherein the cation comprises a protonated or quaternized amine, other than triisopropanolamine, containing 0 to 3 hydroxyl than 50% by weight of water is present in the composition, excluding any volatile propellant that may be present INDEPENDENT CLAIMS (ISSUED OR PENDING, NON-WITHDDRAWN CLAIMS) An antimicrobial composition comprising: APPLICATION/PATENT

protonated or quaternised amine, other than triisopropanolamine, containing 0 to 3 hydroxyl groups per N-substituent and at least at least one N-substituent comprising a C₁-C₁₀ terminal hydrocarbyl group, wherein the cation of the chelator salt is protonated 2-amino-2-methyl-1-29. An antimicrobial composition for use on the outer surface of the human body comprising a carrier material and a salt of a transition metal chelator anion and an organic cation, wherein the cation comprises a

propanol, cyclohexylamine, diisopropanolamine or 2-aminobutan-1-ol. An antimicrobial composition comprising:

6,793,914

a C, to C4 monohydric alcohol carrier fluid, present at a level of at least 50% by weight of the total composition, excluding any volatile (i) a C, to C, propellant present; (ii) an iron (III)

N,N'-ethylenebis[2-(2-hydroxyphenyl)glycine]

an iron (III) chelator selected from the group consisting of:

triethylenetetraaminehexaacetic acid, and

diethylenetriaminepentaacetic acid

a solubility promoter selected from the group consisting of:

 \blacksquare

(a) water,
(b) an organic amine;
(c) a polyhydric alcohol or derivative thereof;
(d) a volatile propellant having fluorine-carbon or oxygen-carbon atoms;
(e) any combination of (a) to (d).

An anti-microbial composition comprising:

a C, to C, monohydric alcohol carrier fluid, present at a level of at greater than 50% by weight of the total composition, excluding any (i) a C₁ to C₄ mon volatile propellant present (ii) an iron (III) chel

an iron (III) chelator selected from the group consisting of

N,N'-ethylenebis[2-(2-hydroxyphenyl)glycine], triethylenetetraaminehexaacetic acid, and diethylenetriaminepentaacetic acid

water as a solubility promoter €

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INDEPENDENT PENDING, NON-WITHDRAWN CLAIMS	1. An antimicrobial composition comprising: A carrier material and a salt of a transition metal chelator comprising a solution in an organic solvent of a transition metal chelator anion and an organic cation, wherein the cation comprises a protonated or quaternized amine, other than triisopropanolamine, containing 0 to 3 hydroxyl groups per N-substituent and at least one N-substituent comprising a Ci-C ₁₀ terminal hydrocarbyl group, wherein the antimicrobial composition is in the form of a deodorant product for use on the outer surface of the human body or on apparel worn in close proximity thereto, wherein less than 50% by weight of water is present in the composition, excluding any volatile propellant that may be present.	29. An antimicrobial composition for use on the outer surface of the human body comprising a carrier material and a salt of a transition metal chelator anion and an organic cation, wherein the cation comprises a protonated or quaternised amine, other than triisopropanolamine, containing 0 to 3 hydroxyl groups per N-substituent and at least at least one N-substituent comprising a C ₁ -C ₁₀ terminal hydrocarbyl group, wherein the cation of the chelator salt is protonated 2-amino-2-methyl-1-propanol, cyclohexylamine, diisopropanolamine or 2-aminobutan-1-ol.	1. An antimicrobial composition comprising: (i) a C ₁ to C ₄ monohydric alcohol carrier fluid, present at a level of at least 25% by weight of the total composition (excluding any volatile propellant present):	(ii) an iron (III) chelator selected from the group consisting of: N.N'-ethylenebis[2-(2-hydroxyphenyl)glycine], triethylenetetraaminehexaacetic acid, and diethylenetriaminepentaacetic acid,	and salts and acid salts thereof; (iii) a solubility promoter selected from the group consisting of: (a) an organic amine; (b) a polyhydric alcohol or derivative thereof;	(c) a volatile propellant having fluorine-carbon of oxygen-carbon atoms; (d) any combination of (a) to (c), wherein if water is present in the composition, the weight ratio of monohydric alcohol carrier fluid to water is greater than 90:10 and wherein the composition is under pressure in an aerosol container and wherein the pressurized antimicrobial composition is homogeneous solution, and wherein the antimicrobial composition is composition for use on the human body or on apparel worn in close proximity thereto.
FILING	1/17/01		1/20/04			
APPLICATION/PATENT FILING	Subject application (09/764,734)		Serial No, 10/895,179*			

* claim format for the '179 application is taken from an Amendment filed on even date of this submission.

ING INDEPENDENT CLAIMS (ISSUED OR PENDING, NON-WITHDRAWN CLAIMS) TE	1. An antimicrobial composition comprising: A carrier material and a salt of a transition metal chelator comprising a solution in an organic solvent of a transition metal chelator anion and an organic cation, wherein the cation comprises a protonated or quaternized amine, other than trisopropanolamine, containing 0 to 3 hydroxyl organic cation, wherein the cation comprises a protonated or quaternized amine, other than trisopropanolamine, containing 0 to 3 hydroxyl groups per N-substituent and at least one N-substituent comprising a C ₁ -C ₁₀ terminal hydrocarbyl group, wherein the antimicrobial composition is in the form of a deodorant product for use on the outer surface of the human body or on apparel worn in close proximity thereto, wherein less than 50% by weight of water is present in the composition, excluding any volatile propellant that may be present.	29. An antimicrobial composition for use on the outer surface of the human body comprising a carrier material and a salt of a transition metal chelator comprising a solution in an organic solvent of a transition metal chelator anion and an organic cation, wherein the cation comprises a protonated or quaternised amine, other than triisopropanolamine, containing 0 to 3 hydroxyl groups per N-substituent and at least at least one N-substituent comprising a Ct-Choteminal hydrocarbyl group, wherein the cation of the chelator salt is protonated 2-amino-2-methyl-1-propanol, cyclohexylamine, disopropanolamine or 2-aminobutan-1-ol.		9. An anti-microbial deodorant composition for use on the human body comprising at least 0.35% by weight of a transition metal chelator and at leat 0.35% of a phenolic or enolic compound that is (a) a transferring dissociation promoter that operates by aiding the reduction of iron (III) bound to transferring to iron(III) and/or (b) an antioxidant comprising a tert-butylphenol group, wherein the weight percentages exclude any volatile propellant present.	21. A method for the manufacture of a deodorant composition for use on the human body, comprising the formation of a mixture of at least 0.35% by weight of a transition metal chelator and at least 0.05% by weight of a phenolic or enolic compound that is (a) a transferring dissociation promoter that operates by aiding the reduction of iron(III) bound to transferring to iron(II) and/or (b) an anti-oxidant comprising tert-butylphenol group, wherein the weight percentages exclude any volatile propellant present.
FILING	1/17/01		10/9/01	····	
APPLICATION/PATENT FILING DATE	Subject application (09/764,734)		6,503,490		

Subject application (09/764,734)		US 6,703,914		10/895,179	*
Claim No./ (Dependency)	Dependent claim requirements	Claim No./ (Dependency)	Dependent claim requirements	Claim No./ (Dependency)	Dependent claim requirements; withdrawn claims (dependent or independent)
		2/(1)	Composition is a deodorant composition for use on the human body or on apparel worn in close proximity thereto.		
30/(1)	Cation of the chelator salt comprises a protonated or quaternised amine containing not more than 1 hydroxyl group per N-substituent at least one N-substituent comprising at least one C ₁ -C ₁₀ terminal hydrocarbyl group		· .		
4/(1)	Cation of the chelator salt is a protonated amine				
5/(4)	Cation of the chelator salt is protonated 2-amino-2-methyl-1-propanol, cyclohexylamine, diisopropanolamine, or aminobutan-1-ol				
6/(1)	Organic cation is present at a level sufficient to neutralize at least 60% of any acid groups on the acid form of the chelator anion.	7/(6)	Organic amine is present at a level sufficient to neutralize at least 60% of any acid groups on the iron (III) chelator.	7/(1)	Organic amine is present at a level sufficient to neutralize at least 60% of any acid groups on the iron (III) chelator.

7/(1)	Organic cation is present at a level sufficient to lead to an	(9)/8	Organic amine is present at a level sufficient to lead to an	8/(1)	Solubility promoter comprises an organic amine and the organic
	aqueous solution of the		aqueous solution of the chelator		amine is present at a level
	chelator salt having a pH of		salt having a pH of between 6		sufficient to lead to an aqueous
	between 6 and 8 (at a molar		and 8 at a molar concentration		solution of the chelator salt having
0	concentration of chelator salt		of chelator equal to that present		a pH of between 6 and 8, at a
	equal to that present in the		in the composition.		molar concentration of chelator salt
	composition).				equal to that present in the
8 // 1)	Anion of the transition metal				
(-), o	chelator call has affinity for				
	iron (III).				
9/(8)	Anion of the transition metal				•
	chelator salt has a binding				
	coefficient for iron (III) of				
	greater than 10 ²⁶ .			•	
11/(1)	Anion of the transition metal				
	chelator salt has an acid form				
	comprising at least five acid				
	groups				
10/(1)	Transition metal chelator salt				
-	is a polyaminocarboxylic acid				-
	salt.				
12/(10)	Transition metal chelator is a	12/(1)		12/(1)	Iron (III) chelator is
	diethylenetriamine			-	diethylenetriaminepentaacetic acid
•	pentaacetic acid salt.				or a salt thereof.
15/(1)	Chelator salt is present at a	9/(1)	Chelator is present at a	13/(1)	Chelator is present at a
	concentration of 0.01% to		concentration of 0.01% to 10%		concentration of 0.01% to 10% by
	10% by weight, excluding any		by weight of the composition,		weight of the composition,
	volatile propellant present.		excluding any volatile propellant		excluding any volatile propellant
			present		present.
		3/(1)	Composition is a homogeneous solution	-	
		-	SOLUTION.		

		4/(3)	Composition is a homogeneous solution in aqueous ethanol.	4/(1)	Homogeneous solution is a solution in aqueous ethanol.
14/(1)	Ratio of other liquid components to water is greater than 65:35 by weight.				
		5/(1)	Weight ratio of C ₁ -C ₄ monohydric alcohol carrier fluid to water is greater than 65:35.		
		6/(1)	Weight ratio of C ₁ -C ₄ monohydric alcohol carrier fluid to water is greater than 75.25 and the solubility promoter comprises an organic amine.		
28/(1)	Organic solvent comprises from 60% to 97% by weight of the total liquids present, excluding any liquefied volatile propellant that may be present.	·			
16/(1)	Composition is in the form of an aerosol composition comprising a volatile propellant	13/(1)	Composition contains a volatile propellant.		
		14/(13)	Volatile propellant comprises from 30 to 99% by weight of the total composition.	18/(1)	Volatile propellant comprises from 30 to 99% by weight of the total composition.
		15/(14)	Contains greater than 40% by weight of volatile propellant and a solubility promoter selected from the group comprising: (a) an organic amine free of	19/(18)	Composition comprises greater than 40% by weight of a volatile propellant and a solubility promoter selected from the group consisting essentially of:

any N-H bonds and/or O-H bonds;
(b) an organic amine and a
polyhydric alcohol or derivative thereof;
(c) an organic amine and a
volatile propellant having
fluorine-carbon or oxygen-
16/(13) Weight ratio of C ₁ -C ₄
monohydric alcohol carrier fluid
to water is between 95:5 and
17/(13) Weight ratio of C ₁ -C ₄
monohydric alcohol carrier fluid
to water is greater than 99 1
10/(1) Comprises an additional anti-
microbial agent.
11/(10) Additional antimicrobial agent is
a cationic bactericide.
12/(1) Comprises fragrance material
at up to 4% by weight of the
composition, excluding any
volatile propellant present.

22	A method of controlling			22	A method of controlling microbial
	microbial numbers on the			(withdrawn)	numbers said method comprising
	outer surface of the human				the application to a substrate of an
	body or on apparel worn in	-			anti-microbial composition
	close proximity thereto, said				according to any of the preceding
	method comprising the				claim.
	application to the outer				
	surface of the human body or		1		
	to apparel worn in close	-			
	proximity thereto of an anti-				
	microbial composition				
	according to claim 1.				
23	A cosmetic method of			23	A cosmetic method of inhibiting the
	inhibiting the generation of			(withdrawn)	generation of malodour comprising
	human body odour, said				the topical application to the
	method comprising the	-			human body or to apparel worn in
	application to the outer				close proximity thereto of a
	surface of the human body or				composition according to any one
	to apparel worn in close				of claims 2 to 21.
	proximity thereto of an anti-			•	
	microbial composition				
	according to claim 1.				
24	A cosmetic method of			24	A cosmetic method of delivering
	delivering enhanced			(withdrawn)	enhanced fragrance intensity
	fragrance intensity comprising				comprising the topical application
	the topical application to the				to the human body or to apparel
	outer surface of the human				worn in close proximity thereto of a
	body or to apparel worn in				compostion according any one of
	close proximity thereto of a				claims 2 to 21 that also comprises
	composition according to		•		a fragrance material.
*	claim 21.				
25/(22)	A method according to claim				
	22 in which, in a preceding				
	step, the outer surface of the	•			

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26 (withdrawn) 25 (withdrawn) A method for the manufacture A method for the manufacture washed and/or in a preceding comprising the formation of a solution in an organic solvent human body or apparel worn lowering the viable microbial of a transition metal chelator addition of an acidic chelator in close proximity thereto is composition, said method composition according to salt according to claim 1. claim 26, comprising the or simultaneous step is microbial agent thereby contacted with an antiof an anti-microbial of an anti-microbial population

having an iron (III) binding constant of 10²³ or greater in a C₁ to C₄

by weight of the total compositior

(excluding any volatile propellant

present), and also comprising a

present at a level of at least 25%

monohydric alcohol carrier fluid

solubility promoter selected from

the group consisting of:

(a) water;

of a solution of an iron (III) chelator

method comprising the formation

an anti-microbial composition, said

A method for the manufacture of

26.

according to claim 25, comprising the addition of the chelator and an

fluorine-carbon or oxygen- carbon

spuoq:

(d) a volatile propellant having

(c) a polyhydric alcohol or

derivative thereof;

(b) an organic amine;

(e) any combination of (a) to (d)

A method for the manufacture of

an anti-microbial composition

organic amine to water to form an

and an amine to water to form		adneous solution, tollowed by
an aqueous solution, followed		dilution with the C ₁ to C ₄
by dilution with an alcohol to		monohydric alcohol carrier fluid to
form an aqueous alcohol		form an aqueous alc0hol solution,
solution, optionally followed		optionally followed by
by pressurization with a	-	pressurization with a liquified
liquified volatile propellant.	•	volatile propellant.